

LISTING OF CLAIMS:

1. (Currently amended) A method for managing a plurality of attributes in association with a plurality of electronic documents and a plurality of attribute types, implemented by a computer system, ~~where an attribute type has a plurality of attributes, the attributes and the attribute types are ordered in a tree-structure hierarchy and an attribute type has parent and child attribute types, a document is assigned a plurality of attribute types at a same and/or different level in the hierarchy, a document is assigned a plurality of attributes for one attribute type, the documents are stored in a first data storage, the attributes are stored in a second data storage, and the first data storage and the second data storage are logically separate and different, said method comprising the at least one of sequential, non-sequential and sequence-independent steps in the computer system of:~~

(A) providing, in the computer system, a first data storage having a group of a plurality of documents including at least one document;

(B) ~~interacting with accepting, from an input device, a user to select user's selection of a plurality of attributes to be associated with a single pre-determined attribute type for the at least one document, wherein the attribute type having parent and child attribute types, the selected attributes are any of the plurality of attributes being predetermined and having different parent attributes, attribute types being predetermined and ordered in a predetermined tree-structure hierarchy; and~~

(C) responsive to the selection ~~of one of the attributes~~, automatically tagging, in the first data storage, the documents in the group including the at least one document, with the selected attribute attributes, and with all attributes of all ancestors but not descendants or siblings ~~in accordance to the hierarchy of the selected attribute attributes;~~

and storing, in ~~the~~ a second data storage, respective references in association with the selected ~~attribute~~ attributes and the ancestor attributes, for later retrieval of individual documents in the group by searching the ancestor attributes, the respective references uniquely indicating respective individual documents in the first data storage,

wherein ~~at~~ at least one document is a data record including a plurality of fields,

wherein the attribute and the attribute type are different from the fields in the document and contents of the fields.

2. (Previously presented) The method of claim 1, wherein providing the group of documents includes selecting the documents included in the group of documents responsive to a user.
3. (Previously presented) The method of claim 2, further comprising the step of organizing the group of documents, wherein the documents are sorted for visual presentation by at least one field therein, wherein the at least one field is different from the attribute and attribute type associated therewith.
4. (Original) The method of claim 2, wherein the group of documents omits a lapsed document.
5. (Previously presented) The method of claim 2, further comprising the step of assigning at least one of the documents to at least one other group.
6. (Original) The method of claim 1, wherein the at least one document is at least one of: XML format, binary format, image data, audio data, an interpretive file, and video data.
7. (Previously presented) The method of claim 1, further comprising searching the second data storage for documents based on criteria including at least one of the attributes

and a corresponding attribute type, and using the respective references in the second data storage to locate the documents in the first data storage.

8. (Previously presented) The method of claim 7, further comprising retrieving the located documents from the first data storage based on the respective references.

9. (Previously presented) The method of claim 8, further comprising displaying information characterizing the documents.

10. (Previously presented) The method of claim 1, wherein at least one of the attributes is associated with at least one user, the at least one document being accessible by a plurality of users including the at least one user, further comprising limiting access to the at least one attribute to the at least one user associated therewith.

11. (Previously presented) The method of claim 1, wherein the attributes further include at least one of: a reference to a URL, a reference to an other file, and user-provided text.

12. (Previously presented) The method of claim 1, wherein the documents include: an invention disclosure document, a patent document, a trademark document, a copyright document, a product description document, a contract document, a license document, a sui generis protection document, a design registration document, a trade secret document, and an opinion document.

13. (Previously presented) The method of claim 1, further comprising preliminarily determining, for the attribute types, the plurality of attributes.

14. (Canceled)

15. (Previously presented) The method of claim 1, wherein the attributes are selected from a plurality of attribute types representative of at least one of: a product and a service.

16. (Original) The method of claim 15, wherein the plurality of attribute types further includes at least one of: an actor, a user entity, a current owner, and a project.

17. (Canceled)

18. (Previously presented) The method of claim 1, further comprising the step of exporting the tree structure hierarchy including the attributes and the attribute types.

19. (Previously presented) The method of claim 1, further comprising utilizing the attributes as criteria for at least one of searching, retrieving, reporting, and viewing the at least one document.

20. (Previously presented) The method of claim 19, wherein the attributes are utilized in combination with: (i) at least one of the attribute types, (ii) at least one sub-type of the at least one attribute type, (iii) a content of at least one field in the at least one document; (iv) a type of at least one field in the at least one document; and (vi) information derived from the at least one field in the at least one document.

21. (Previously presented) The method of claim 1, wherein the respective references correspond to the serial numbers of the respective documents.

22. (Currently amended) A method for managing a plurality of attributes in association with a plurality of electronic documents and a plurality of attribute types, implemented by a computer system, ~~where an attribute type has a plurality of attributes, the attributes and the attribute types are ordered in a tree structure hierarchy and an attribute type has parent and child attribute types, a document is assigned a plurality of attribute types at a same and/or different level in the hierarchy, a document is assigned a plurality of attributes for one attribute type, the documents are stored in a first data storage, the attributes are stored in a second data storage, and the first data storage and the second data storage are logically separate and different,~~ said method comprising the at

least one of sequential, non-sequential and sequence-independent steps in the computer system of:

(A) providing, in the computer system, a first data storage having a group of a plurality of documents including at least one document;

(B) interacting with a user to select accepting, from an input device, a user's selection of a plurality of attributes to be associated with a single pre-determined attribute type for the at least one document, wherein the attribute type having parent and child attribute types, the selected attributes is any of the plurality of attributes being predetermined and having different parent attributes, attribute types being predetermined and ordered in a predetermined tree-structure hierarchy;

(C) responsive to the selection of ~~one of~~ the attributes, automatically tagging, in the first data storage, the documents in the group including the at least one document, with the selected ~~attribute attributes~~, and with all attributes of all ancestors but not descendants or siblings ~~in~~ according to the hierarchy of the selected ~~attribute attributes~~; and storing, in the ~~a~~ second data storage, respective references in association with the selected ~~attribute attributes~~ and the ancestor attributes, for later retrieval of individual documents in the group by searching the ancestor attributes, the respective references uniquely indicating respective individual documents in the first data storage; and

(D) wherein the at least one document and the at least one other document are representative of at least one of: an invention disclosure document, a patent document, a trademark document, a copyright document, a product description document, a contract document, a license document, a sui generis protection document, a design registration document, a trade secret document, and an opinion document,

wherein a document is a data record including a plurality of fields,

wherein the attribute and the attribute type is different from the fields in the document and contents of the fields.

23. (Previously presented) The method of claim 22, wherein providing the group of documents includes selecting the documents included in the group of documents responsive to a user.

24. (Previously presented) The method of claim 22, further comprising searching the second data storage for documents based on criteria including at least one of the attributes and a corresponding attribute type, and using the respective references in the second data storage to locate the documents in the first data storage.

25. (Previously presented) The method of claim 22, wherein the attributes are selected from a plurality of attribute types representative of at least one of: a product and a service.

26. (Canceled)

27. (Previously presented) The method of claim 22, further comprising utilizing the attributes as criteria for at least one of searching, retrieving, reporting, and viewing the at least one document.

28. (Previously presented) The method of claim 27, wherein the attributes are utilized in combination with: (i) the attribute types, (ii) at least one sub-type of the at least one attribute type, (iii) a content of at least one field in the at least one document; (iv) a type of at least one field in the at least one document; and (vi) information derived from the at least one field in the at least one document.

29. (Previously presented) The method of claim 22, wherein the respective references correspond to the serial numbers of the respective documents.

30. (Currently amended) A computer program product, for use in managing a plurality of attributes in association with a plurality of electronic documents and a

plurality of attribute types, stored in connection with at least one computer system, ~~wherein an attribute type has a plurality of attributes, the attributes and the attribute types are ordered in a tree structure hierarchy and an attribute type has parent and child attribute types, a document is assigned a plurality of attribute types at a same and/or different level in the hierarchy, a document is assigned a plurality of attributes for one attribute type, the documents are stored in a first data storage, the attributes are stored in a second data storage, and the first data storage and the second data storage are logically separate and different,~~ said computer program product comprising:

- (A) at least one computer readable medium, readable by the at least one computer system;
- (B) instructions, provided on the at least one computer readable medium, for providing a first data storage having a group of a plurality of documents including at least one document;
- (C) instructions, provided on the at least one computer readable medium, for interacting with a user to select accepting, from an input device, a user's selection of a plurality of attributes to be associated with a single pre-determined attribute type for the at least one document, wherein the attribute type having parent and child attribute types, the selected attributes are any of the plurality of attributes being predetermined and having different parent attributes, attribute types being predetermined and ordered in a predetermined tree-structure hierarchy; and
- (D) instructions, provided on the at least one computer readable medium, for automatically tagging, responsive to the selection of ~~one of the~~ attributes, in the first data storage, the documents in the group including the at least one document, with the selected ~~attribute attributes,~~ and with all attributes of all ancestors but not descendants or

siblings ~~in~~according to the hierarchy of the selected ~~attribute~~attributes; and storing, in ~~the~~a second data storage, respective references in association with the selected ~~attribute~~attributes and the ancestor attributes, for later retrieval of individual documents in the group by searching the ancestor attributes, the respective references uniquely indicating respective individual documents in the first data storage;

(E) wherein the at least one document and the at least one other document are representative of at least one of: an invention disclosure document, a patent document, a trademark document, a copyright document, a product description document, a contract document, a license document, a sui generis protection document, a design registration document, a trade secret document, and an opinion document,

wherein a document is a data record including a plurality of fields,

wherein the attribute and the attribute type is different from the fields in the document and contents of the fields.

31. (Previously presented) The computer program product of claim 30, wherein providing the group of documents includes selecting the documents included in the group of documents responsive to a user, wherein the group of documents omits a lapsed document.

32. (Previously presented) The computer program product of claim 30, further comprising instructions, provided on the at least one computer readable medium, for searching the second data storage for documents based on criteria including at least one of the attributes and a corresponding attribute type, using the respective references in the second data storage to locate the documents in the first data storage.

33. (Previously presented) The computer program product of claim 30, wherein the attributes are selected from a plurality of attribute types representative of at least one of: a product and a service.

34. (Canceled)

35. (Previously presented) The computer program product of claim 30, further comprising instructions, provided on the at least one computer readable medium, for utilizing the attributes as criteria for at least one of searching, retrieving, reporting, and viewing the at least one document.

36. (Previously presented) The computer program product of claim 35, wherein the attributes are utilized in combination with: (i) at least one of the attribute types, (ii) at least one sub-type of the at least one attribute type, (iii) a content of at least one field in the at least one document; (iv) a type of at least one field in the at least one document; and (vi) information derived from the at least one field in the at least one document.

37. (Previously presented) The computer program product of claim 30, wherein the respective references correspond to the serial numbers of the respective documents.

38. (Currently amended) A system, implemented on at least one computer, for managing a plurality of attributes in association with a plurality of electronic documents and a plurality of attribute types, ~~where an attribute type has a plurality of attributes, the attributes and the attribute types are ordered in a tree-structure hierarchy and an attribute type has parent and child attribute types, a document is assigned a plurality of attribute types at a same and/or different level in the hierarchy, a document is assigned a plurality of attributes for one attribute type, the documents are stored in a first data storage, the attributes are stored in a second data storage, and the first data storage and the second data storage are logically separate and different,~~ said system comprising:

(A) means, in the at least one computer, for providing a first data storage having a group of a plurality of documents including at least one document;

(B) means, in the at least one computer, for ~~interacting with a user to select~~ accepting, from an input device, a user's selection of a plurality of attributes to be associated with a single pre-determined attribute type for the at least one document, wherein the attribute type having parent and child attribute types, the selected attributes are any of the plurality of attributes being predetermined and having different parent attributes, attribute types being predetermined and ordered in a predetermined tree-structure hierarchy; and

(C) means, in the at least one computer, responsive to the selection of ~~one of~~ the attributes, for automatically tagging, in the first data storage, the documents in the group including the at least one document, with the selected ~~attribute attributes~~, and with all attributes of all ancestors but not descendants or siblings ~~in~~ according to the hierarchy of the selected ~~attribute attributes~~; and storing, in ~~the~~ a second data storage, respective references in association with the selected ~~attribute attributes~~ and the ancestor attributes, for later retrieval of individual documents in the group by searching the ancestor attributes, the respective references uniquely indicating respective individual documents in the first data storage;

(D) wherein the at least one document and the at least one other document are representative of at least one of: an invention disclosure document, a patent document, a trademark document, a copyright document, a product description document, a contract document, a license document, a sui generis protection document, a design registration document, a trade secret document, and an opinion document,

wherein a document is a data record including a plurality of fields,

wherein the attribute and the attribute type are different from the fields in the document and contents of the fields.

39. (Previously presented) The system of claim 38, wherein the means for providing the group of documents includes selecting the documents included in the group of documents responsive to a user.

40. (Previously presented) The system of claim 38, further comprising means, in the at least one computer, for searching the second data storage for documents based on criteria including at least one of the attributes and a corresponding attribute type, and using the respective references in the second data storage to locate the documents in the first data storage.

41. (Previously presented) The system of claim 38, wherein the attributes are selected from a plurality of attribute types representative of at least one of: a product and a service.

42. (Canceled)

43. (Previously presented) The system of claim 38, further comprising utilizing the attributes as criteria for at least one of searching, retrieving, reporting, and viewing the at least one document.

44. (Previously presented) The system of claim 43, wherein the attributes are utilized in combination with: (i) the attribute types, (ii) at least one sub-type of the at least one attribute type, (iii) a content of at least one field in the at least one document; (iv) a type of at least one field in the at least one document; and (vi) information derived from the at least one field in the at least one document.

45. (Previously presented) The system of claim 38, wherein the respective references correspond to the serial numbers of the respective documents.

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